PROJECT DESCRIPTION

<u>GENERAL</u>

THIS PORTION OF THE PROJECT INVOLVES THE INSTALLATION OF ACCESSIBLE PEDESTRIAN SIGNALS (APS) AND COUNTDOWN PEDESTRIAN SIGNALS (CPS) ON THE NORTH, EAST AND WEST LEGS

OF THE INTERSECTION OF MD 157 (MERRITT BOULEVARD) AND SEARLES ROAD ROAD IN BALTIMORE COUNTY. VIDEO SETBACK AND SAMPLING DETECTION ARE PROPOSED FOR NORTHBOUND AND SOUTHBOUND LEGS OF MD 157.

MD 157 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA FOUR-PHASE, FULLY TRAFFIC-ACTUATED MODE. MAINLINE PEDESTRIAN PHASES FOR THE EAST AND WEST LEGS, AS WELL AS AN ALTERNATIVE SIDE STREET PEDESTRIAN PHASE FOR THE NORTH LEG ARE PROPOSED.

THE EXISTING BASE MOUNTED CABINET AND CONTROLLER WILL REMAIN. THE SHA SIGNAL SHOP WILL INSTALL ONE (I) 2 WIRE CENTRAL CONTROL UNIT AND ONE (I) VIDEO DETECTION INTERFACE EQUIPMENT: 1-8 CAMERAS WITHIN THE CABINET.

APS WILL FUNCTION AS FOLLOWS:

TO CROSS MERRITT BOULEVARD

. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS MERRITT AT SEARLES, CROSSWALK ANGLES LEFT, WAIT".

. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

TO CROSS SEARLES ROAD

EX. U/G //C SOUTH TO MEADOW LANE

 ∇

NML

NML X

. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS SEARLES AT MERRITT, WAIT".

. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

WIRING DIAGRAM

BGE 264477

THE CONTACT PERSONS FOR DISTRICT #4 ARE AS FOLLOWS:

Ms.Erin Kuhn Assistant District Engineer - Traffic Phone: 410-229-2381

Mr. Michael Pasquariello District Utility Engineer Phone: 410-229-2421

Mr. Andre Futrell Assistant District Engineer - Maintenance Phone: 410-229-2361

OFFICE OF TRAFFIC AND SAFETY:

Ms. Corren Johnson Chief, Traffic Operations Division Phone: 410-787-7630

Mr. Robert Snyder Assistant Division Chief, Traffic Operations 410-787-7630

Mr. Edward Rodenhizer Chief Signal Operations Phone: 410-787-7650

Mr. Eugene Balley Chief Sign Operations 410-787-7670

The Power Company is: BG&E CO. 7317 Parkway Dr. South Hanover, MD Phone: 410-859-9062

EX. O/H /C NORTH

TO HOLABIRD AVE

NML

---B,C,D,E,F,G,H,J K,L,M,N,P,Q,R,S

►H, J, K, L, M, N

B,C,D,E,F,G,H,J

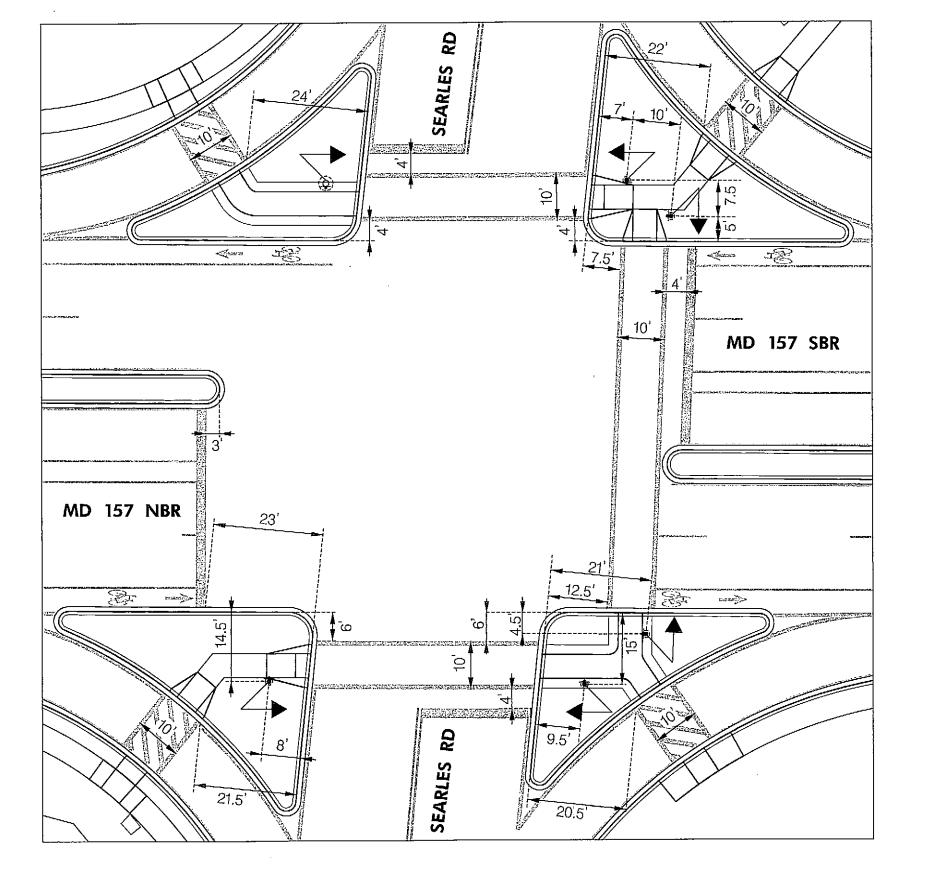
K, L, M, N, P, Q, R, S

FLASHING

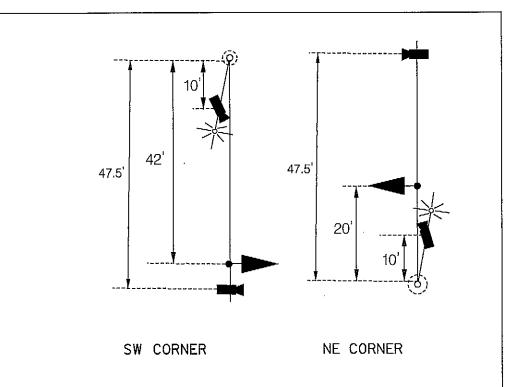
OPERATION

E,F,G,L,M,N,P,S





PROPOSED MAST ARM DETAIL - I"=20'



EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

CATEGORY CODE QUANTITY **DESCRIPTION** VIDEO DETECTION INTERFACE EQUIPMENT: I-8 CAMERAS LEA 900000

6 SF

830 LF

865 LF

973023

4 EA - RIO-3(I) (9 IN. X I5 IN.) "PUSH BUTTON TO CROSS SEARLES ROAD"

SHEET ALUMINUM SIGNS:

2 EA - RIO-3(I) (9 IN. X I5 IN.) "PUSH BUTTON TO CROSS MERRITT BLVD"

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

CATEGORY CODE	QUANTITY	DESCRIPTION
203030	I CY	TEST PIT EXCAVATION
585621	670 LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
585625	150 LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE
800000	6 EA	ACCESSIBLE PEDESTRIAN PUSHBUTTON
800000	IO LF	PULL AND REROUTE EXISTING CABLE
800000	I EA	2 WIRE CENTRAL CONTROL UNIT
800000	6 EA	16 IN. LED COUNTDOWN PEDESTRIAN SIGNAL HEAD SECTION
800000	4 EA	VIDEO DETECTION CAMERA AND CABLE
801004	I CY	CONCRETE FOR SIGNAL FOUNDATION
802145	I2 EA	ADJUST EXISTING HANDHOLE
802501	95 LF	NO.6 AWG STRANDED BARE COPPER GROUND WIRE
805125	45 LF	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
813015	6 SF	INSTALL OVERHEAD SIGN
818004	5 EA	IO FOOT BREAKAWAY PEDESTAL POLE
837001	2 EA	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
860265	2 EA	RELOCATE EXISTING SIGNAL HEAD

EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)

ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

CATEGORY CODE DESCRIPTION <u>QUANTITY</u>

NONE - ALL REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION

MD 157 (MERRITT BOULEVARD)

AND SEARLES ROAD DUNDALK, MARYLAND

GENERAL INFORMATION SHEET

SCALE NONE ADVERTISED DATE 03/2013 CONTRACT NO. BA3325177

BALTIMORE DRAWN BY 03015703.22 TIMS NO. F.A.P. NO.

SHEET NO. 71 OF 100

DRAWING **SG-06** OF 08 TS NO.4340B-GI

PLOTTED: Monday, March 18, 2013 AT 01:59 PM FILE; I:\PROJECTS\4013887\4013887_0016\Drawings\TRA\Traffic\Signals\Searles\006_pSG=N003_MD157_Searles Road.dgn



7125 Ambassador Road, Suite 200 Baltimore, MD 21244 www.stvinc.com

ELECTRICAL CABLE - 2 CONDUCTOR (NO.14 AWG) EPS - EXISTING POWER SERVICE NML -NON-INVASIVE MICROLOOP PROBE SET

NO. 6 AWG STRANDED BARE A COPPER GROUND WIRE

_ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG)

PROPOSED GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH EXISTING GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 PHASE 2 AND 6 PED CLEARANCE PHASE 2 AND 6 CHANGE PHASE 4 AND 8 PHASE 4 AND 8 CHANGE PHASE 4 AND 8 ALT. PED CLEARANCE PHASE 4 AND 8 ALT. CHANGE R R

PHASE CHART

CONTROL CABLE - VIDEO DETECTION

CAMERA TO CONTROLLER

T -USE EXISTING CABLE